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Office of the Secretary  
Federal Communications Commission  
Room 222  
1919 M Street NW  
Washington, DC 20554

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Ref: CC Docket No. 96-45

The enclosed is in response to Ref: CC Docket No. 96-45. Please find attached a short description of the Rural Emergency Medical Education Consortium ( REMEC ), and answers to the questions you have asked.

Daniel J. Fly  
Director

## **RURAL EMERGENCY MEDICAL EDUCATION CONSORTIUM**

**1105 Sixth Street  
Traverse City, MI. 49684  
616-935-7945**

**( REMEC )**

Northern Michigan's first Interactive Distance Learning Network for health care professionals has successfully completed its third and final year of a grant from the U.S. Department of Health and Human Services Rural Outreach Program. Rural Emergency Medical Education Consortium ( REMEC ) is now financed by consortium membership fees. Current consortium members are:

### **Munson Medical Center, Traverse City**

Leelanau Memorial Hospital, Northport	Northern Michigan Hospital, Petoskey
Mercy Health Services North, Cadillac	Kalkaska Memorial Health Center, Kalkaska
Mercy Health Services North, Grayling	Charlevoix Area Hospital, Charlevoix
War Memorial Hospital, Sault Ste. Marie	Paul Oliver Memorial Hospital, Frankfort
Otsego Memorial Hospital, Gaylord	West Shore Hospital, Manistee

REMEC's network spans a twenty county region with a population of over 300,126 within an area of 12,166 square miles. The consortium is unique in that independent hospitals and health clinics have come together to design and implement the REMEC program to meet the needs of their communities on a local and regional basis. Cost reduction and improving traditional methods of obtaining education in professional and geographically isolated areas benefit and enhance community health. REMEC services are shaped by the needs of its members and the communities they serve. REMEC has broadcast 300 educational programs over 648 broadcast hours with 10,000 participants in their programs.

By providing cost effective interactive televideo conferencing, REMEC has been a vital cog in addressing the issues of access, quality, cost containment and duplication of educational efforts. All members of the consortium have the ability to broadcast and receive presentations. The REMEC network overcomes barriers to medical education such as distance, cost and staff coverage since education is available on-site from any of the REMEC members. Consortium hospitals and providers choose to access inexpensive locally-available medical education provided through the REMEC interactive televideo network as an alternative to costly travel to distant educational courses.

REMEC includes a strong network component that extends voice, data and video capabilities to its members. REMEC's mission continues to remain focused on the

enhancement and delivery of health related education to health care professionals and the communities they serve in Northern Michigan and the Upper Peninsula. In addition to health care professionals, community members are attending educational offerings such as Cardiac Rehab Lecture Series, Diabetic, Pulmonary Education Seminars and Sleep Disorder Seminars from their local hospitals. Health professionals from across the region are using the network to communicate; saving precious time and travel.

As REMEC enters its fourth year, its focus will add applications in the fields of telemedicine, teleradiology and a regional health information network. Munson Medical Center has implemented a teleradiology network in which diagnostic quality radiographic images are being sent over the REMEC communication lines.

REMEC has succeeded in meeting its original goals and has accomplished much more. Programming and networking efforts by REMEC have linked video networks statewide. Future network connections will enhance the consortiums' ability to video conference within the Michigan Collegiate Telecommunications Association (MiCTA). This network capability provides members the ability to broadcast and receive distance learning programming from MiCTA colleges, university's and affiliated K-12 school systems. Collaboration of all REMEC Consortium members is the key to REMEC's success story.

For additional information contact:

Daniel J. Fly  
Director  
616-935-7941

**Questions to Address:**

1. Name of project:

Rural Emergency Medical Education Consortium (REMEC)

2. Please list each of the project's sites:

Name of Site:

State in which it is located:

Michigan (Lower Northern Peninsula)

Area of Service covers 20 counties.

Munson Medical Center

Mercy Health Services North (Cadillac/Grayling)

Northern Michigan Hospital

Paul Oliver Memorial Hospital

Charlevoix Area Hospital

Otsego Memorial Hospital

Leelanau Memorial Hospital

War Memorial Hospital

Kalkaska Memorial Health Center

West Shore Hospital

Please answer the following questions for each of your sites.  
Use additional sheets if necessary.

3. What is the nearest city of population equal to or greater than 50,00 in your state, and approximately how far are you from its boundary?

City: Grand Rapids Distance from city boundary: 140 miles from REMEC Hub

4. Name of the project's telecommunications service provider:

Ameritech / AT&T

5. Level of telecommunications service the project is currently using: (For example, voice grade, 144 Kbps (ISDN), 384 Kbps, T-1 or equivalent)

(Dedicated T-1 lines link all REMEC Sites.)

6. Charges for telecommunications service:

Is there a monthly charge? No ☐ Yes ☒ (Site dependent)

If yes, how much is the charge? \$16,250 / month Total

Is there a usage-based charge? No ☒ Yes ☐

If yes, how much is the charge? N/A

Is there a distance component (such as a per-mile fee) of the charge? No ☐ Yes ☒

If yes, how much is the charge? Approximately .08¢ per mile

Was there an installation fee? No ☐ Yes ☒

If yes, how much was the charge? \$600 per site

Is the charge the regular tarrified rate, or is there a discount from the telecommunications provider? Tarrified ☐ Discount ☒

If there is a discount, how much is it? Approximately 30%

7. How does the project use telecommunications in the delivery of health care? (For example -- to send x-rays, distribute public health information, or perform video consultations. Please identify any occasional or episodic uses, such as might result from an outbreak of disease.)

Major REMEC use of telecommunications technology is for delivering fully interactive video, distance learning, continuing medical education. Targets are Emergency Service Providers, Physicians, Nurses and other health practitioners. Interactive video programs are offered to the community population for public health information and rehabilitation programs. Tele-radiology use occurs daily between sites, using high resolution monitors for primary diagnosis. Physicians are scheduling consultation times and hospital Administration hold regional meetings and network using fully interactive video.

8. Could the project provide the services it is currently providing with less bandwidth? What effect would a lesser level of bandwidth have? (The implications of using greater or lesser levels of telecommunications services are related to image transmission time. What would the be the impact if the health care activities for which you now use telecommunications took twice as long, or if they could be completed in half the time?)

No.

REMEC would have difficulty providing service to its membership with decreased bandwidth. The success of REMEC to date is linked to quality fully interactive video using our dedicated T-1 lines. Tele-radiology applications or consultations would be unacceptable at lower bandwidths that would effect diagnostic image quality and transmission times. Increased speeds and additional "affordable" bandwidth would enhance programming and add capacity for network application growth.

9. What would the implications of having a greater level of bandwidth be?

Greater levels of available bandwidth at affordable prices would increase video and digital image quality. Acceptability of REMEC interactive video is directly related to bandwidth. Telemedicine and teleradiology application would increase due in part to speed of image transmission and increased levels of image quality. REMEC supports the use of higher bandwidth as it relates to image quality, video and digital transmission speeds.

10. Do you have e-mail? No ☐ Yes ☒ (REMEC Office)

11. Do you have Internet access? No ☐ Yes ☒ (REMEC Office)

If yes, do you incur long-distance charges by using it?

No ☒ Yes ☐ (Connection through Michigan Center for Rural Health)

Please estimate your number of hours of Internet use per month:

15 - 20 hours of Internet use per month

12. If you have access to the Internet, please list any purposes other than e-mail (such as accessing databases such as Lexis/Nexis) for which you use it:

Health Related Web Pages.

Grant funding sources and information.

Federal Government Healthcare information.

Telemedicine Projects and program information.